gram. Hydrogeologic and soil information can be used to set geographic priorities for sampling (Cohen and Bowes, 1984).

Given the large number of pesticides and the geographic range of their use, the use data in California have been essential for developing cost-effective ground water monitoring programs. For example, in 1977, DBCP was discovered in the ground water near a California plant that produced the pesticide. The state instituted a ground water monitoring program to look for the nematicide DBCP and used the Pesticide Use Data Base to determine where sampling should be done. A single crop application of DBCP has resulted in contamination in some areas. Therefore, it was important that the location of all previous usage be documented. By 1984, about 2500 well samples containing DBCP contamination had been found. Many of these contamination events are in small, private wells, and the high spatial resolution of the use data was important in determining which wells would be sampled. Subsequent determination that other nematicides (EDB,1,2-D and 1,3-D) were also environmental threats led to additional well monitoring for those chemicals, which was also guided by the spatially detailed pesticide use data.

The economic value of the Pesticide Use Data Base was again illustrated when, in 1983, the California Legislature passed AB 1803, a law requiring widespread monitoring for a range of potential pollutants. Although the bill initially included an appropriation for $4 million, the law was signed with no funds appropriated for the study. With regard to pesticides, the Department of Health Services determined 40 "priority" pesticides that were most likely to be serious pollutants. They initially considered 880 large water systems (200-plus hookups). However, to require 880 systems to sample for 40 pesticides would be excessively expensive and unwarranted. Since no special appropriation was made for this study, it was important that the cost for the local water utilities be kept as low as possible. Therefore, the Pesticide Use Data Base information was used to determine which substances should be analyzed by each water supply system, substantially reducing the number of analyses required. The lowered cost would not have been possible without the Pesticide Use Data Base. The study probably would have been even more cost effective had hydrogeologic information been available.

The Environmental Protection Agency is in the final stages of developing a monitoring program for pesticides. This is a joint effort within EPA between the Office of Pesticides and the Office of Drinking Water under both the FIFRA and the SD WA. Initiation of the collection of specimens is scheduled for June 1986. In its monitoring program, EPA used data on environmental fate to select the list of chemicals for which they will sample. In-